

IR-1649 (2-1939)

TRENCH FET WITH NON OVERLAPPING POLY  
AND REMOTE CONTACT THEREFOR

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ABSTRACT OF THE DISCLOSURE

10 A power MOSFET has a plurality of spaced rows  
of parallel coextensive trenches. The trenches are lined  
with a gate oxide and are filled with conductive  
polysilicon. Spaced narrow polysilicon strips overlies  
the silicon surface and connects adjacent trenches to one  
another. The source contact is made at a location remote  
from the trenches and between the rows of trenches. The  
trenches are 1.8 microns deep, are 0.6 microns wide and  
15 are spaced by about 0.6 microns or greater. The device  
has a very low figure of merit and is useful especially  
in low voltage circuits.